## MEASURING THE QUALITY OF LIFE

It is difficult to know your direction if the route is not mapped. Developments in social statistics—for example "Social Trends," due out next week—should help in this way.

Claus Moser
Director, Central
Statistical Office

It is becoming increasingly common to talk of the need for a means to measure the quality of life. European Conservation Year may have helped in this. And in the United States one study, Toward A Social Report—discussed in New Society by Peter Hall in "There is no substitute," 15 October—has already tried to find a remedy. This will all be welcomed by social statisticians, who have been concerning themselves with aspects of this problem for some years.

It is tempting to compare these efforts to our approach to measuring changes in the economic situation of the country. This over-simplifies the issue. It is unlikely that anyone will ever be able meaningfully to measure a single concept of the quality of life in the same way that we measure, for example, changes in the gross national product; and I personally doubt whether it would even be a desirable aim. But as I want to try to demonstrate here, we are now endeavouring to improve the scope of our social statistics in Britain, and our understanding of the way in which they interrelate, in order to provide the means to monitor some broad aspects of the social scene and of the quality of life.

The comparison with economic statistics is, however, illuminating in another sense. Why we are now able to measure the country's economic situation reasonably well is because statisticians have, in recent decades, continuously improved the flow of economic data, in response to pressure from governments for better information to help them in tuning and steering the economy. This demand has provided a great stimulus to developing comprehensive economic models and integrated statistical systems, and to refining and speeding up the regular economic indicators.

Social statistics are at a different stage. Policy pressures for frequent, regular and quick information in this field are more recent in origin; and social statistics are often still expected to be provided as a by-product of administrative procedures, rather than from special surveys and regular mechanisms for collection. There has been—with some obvious exceptions, such as population—relatively little interest in social forecasting. And, until recently, no one had contemplated integrating social data into a system like the national accounts.

But attitudes are changing throughout the world, as public and political demands mount for effective indicators of progress in the quality of man's life and environment; and social statisticians are responding to the challenge. In this country, there has already been a rapid increase in the statistical strength of social policy departments, and two out of five government statisticians are now occupied with social statistics. Consequently, we have seen significant improvements in the range and quality of statistics produced in each of the individual social policy areas-in population, education, housing, health, crime, social security, and so on. And a further boost to the collection and analysis of social data will come from the recent creation of the Office of Population Censuses and Surveys (opcs).

There is, then, a continuing effort to develop and improve the statistics available for individual fields of social policy. Here, however, I principally want to discuss the work going on in the Central Statistical Office in coordinating these developments into a coherent system, and in identifying and beginning to fill the gaps which emerge from this more systematic presentation. And I want to examine how meaningful social indicators can be got from this data.

Our first visible step in this direction has been the development of the new publication, Social Trends,

the first issue of which is due out next week Although a great amount of social data are available from existing official publications, the tendency is for them to be compartmentalised in separate policy areas What we are trying to do, for the first time, in Social Trends, through a comprehensive but highly selective array of these data, is to present a rounded picture of British society; and to identify and highlight, with easily assimilable charts and diagrams, trends and patterns in the most important aspects of social conditions. It will, in an at present unsophisticated way, begin to indicate changes in the "quality of life."

One way in which Social Trends will contribute to our thinking is by identifying, through its coherent presentation of the data, some of the gaps in the present statistical framework. Many social statistics are, as I have said, by-products of administrative and accounting procedures and, consequently, they tend to concentrate on aspects of social conditions and problems which are already being attended to. Social Trends will bring out some of the aspects which are relatively poorly served by regular statistics—for example, information about the kinds of people who should, but who do not, benefit from social services.

Again, existing statistics tend to produce information about the "average" person, thus concealing the wide range of individual situations, when what is needed is an understanding of the variety of people and households that make up the social scene—taking account of their educational background housing conditions, income groups, age, and so on. In this way, the extent to which social factors or problems are interrelated begins to become clearer.

This is all only a part of something much larger—the effort to try to create, from the vast array of largely unrelated data that are and will be collected, an integrated system of social and demographic statistics. Society is a highly complex organism; we often have only the vaguest ideas of how certain developments are motivated and interrelated; and to try to integrate all of its various aspects into a system, or series of subsystems of statistics, without the benefit of a common unit of measurement, is a difficult task—a long-term project.

It is quite clear, however, that nothing more effectively achieves improvements in statistics than the attempt to integrate them into a single framework, and we shall proceed with this, broadly along what are now internationally agreed lines. The subject is being pursued by the United Nations Statistical Commission and its European counterpart, the Conference of European Statisticians.

The aim is to construct a system in which the many statistics having a bearing on social conditions, social resources, and the flows of people through various activities and institutions, are brought together coherently and meaningfully. Such a system could, if successful, throw light on the relationships between social investments and changes in social conditions and welfare and on the links between economic and social changes. Even if these aims are hard to realise, the system could produce statistical evidence on the way different aspects of social conditionshealth, housing, education, income, social careinterrelate in the lives of people, and to what extent inequalities in one are reflected in inequalities in the other. An integrated system could also trace changes in the circumstances and conditions as people go through the life cycle, experiencing the different activities and belonging to different social and institu-

The system will eventually contain all the obvious components of social structure and social con-

ditions-such as population, health, education and income. Its basic units will be individuals, families and households, though there will be tables relating to institutions, regions, the government and other group-ings. The system wall not be a single vast tabulation in which everything is interrelated. We conceive of it as a number of different subsystems, linked with each other, and within themselves in varying ways.

One approach, already developed to a considerable extent by Professor Richard Stone at Cambridge, is a system of socio-demographic accounts in which the stocks and flows of people, through various events in their lives, are traced. He originally concentrated on the education system. But he is elaborating his approach to flows through the labour force and is making additional classifications of the individuals, according to other aspects of their circumstances. He is also investigating how far this approach can be extended to fields such as health or housing.

The task is so large that the only sensible approach is by a series of relatively simple steps. Work on the social-demographic accounts has, thanks to Professor Stone's efforts, advanced furthest, but other approaches are possible. We are ourselves investigating some of these at present.

The development of a system of social statistics will depend to a large extent on the possibility-in terms of public acceptability and of the availability of resources-of providing a regular flow of data about households and individuals, of being able to fill the gaps in the system as we identify them. The primary source of such information has traditionally been the census of population. This is indispensable, not only because it provides benchmarks for subsequent surveys, but also for the wealth of detail about small areas or small social groups which can only be picked up from a complete census. But although regular, it is not frequent; and it needs to be supplemented by inter-censal surveys.

The most important regular survey of this kind in Britain is the Family Expenditure Survey, which has been carried out on a continuous basis since 1957 and is now based on an annual sample of 10,000 households. The survey is central to our network of income and expenditure information; but because of its information on household characteristics, it is also an important source of other social statistics. As departments have become increasingly concerned with the way their policies are affecting individuals and families, they have been relying more on ad-hoc sample surveys to supplement administrative and the census of population data. This is one of the reasons for the development of a major new project, the General Household Survey

The aim of this survey is to provide a regular picture of changing social conditions to help the formation and discussion of social policies. The survey, which is being carried out by the opcs on behalf of the Central Statistical Office and other departments, will provide information, in an interrelated way, on population, migration, education, health, housing and so on, on a frequent, regular and timely basis. The questionnaire is, in part, concerned with households and, in part, with individuals,

The survey is continuous, but the analysis of results will be quarterly, and some basic questions on topics like current and past employment and population information will be analysed for each quarter. The analysis for other topics will be annual. There will also be ad hoc questions to meet particular policy needs. Some topics still need to be dealt with in depth by special ad hoc surveys; but a great deal can be learned from the interrelationships and linkages that will be unique to the General Household Survey-for example, the links between housing and employment mobility, and between health and education.

All of the developments I have so far discussed are valuable in themselves and contribute towards a better understanding of the social scene. Our task would not be complete, however, unless we were able to in-



changes in society. So we are beginning to try to define those broad aspects of life that it would be desirable to monitor, and to consider how it might be possible to measure them. It is hoped that such a set of "social indicators" will be relatively small in number so policy makers may have a reasonable chance of grasping their implication.

The first question is how best to assess progress in individual fields such as health, leisure, education and crime by individual indicators; and to illuminate, again by individual indicators social concerns such as the nature of the environment, work satisfaction, racial harmony and so forth.

Put most simply, a series becomes a social indicator when it relates to or fulfils a specific purpose. Thus, a series relating to the number of children in hospitals, is, in some sense, a measure of the nation's ill-health. But it is also an indicator of the extent to which illness separates children from their parents. Indicators can be specific, or they can relate to broad conditions. There must, however, be some purpose enabling one to judge whether the behaviour of the indicator shows progress or decline.

Work on social indicators in a given field-health, say-must start from an analysis of aims or purposes, including policy goals and administrative targets, and then go into the development of representative indicators-ie, series which are, in some sense, representative of broad aspects of social conditions. Our present work in this area is aimed at clarification of the concept of a social indicator, and analysis of the various different types of indicators and the purposes they will fulfil.

Potentially, the most interesting and useful type will be the predictive indicator-ie, one that will act not only as a warning light but will, through an associated system of statistical analysis, lead to an indication of the reason for change, its consequences and any necessary remedial action. Indicators of this type will be the most difficult to develop without a framework of social theory which would show the interrelationships between various social characteristics and which woud be essential to get an explanation of the causes

A second group of indicators-informative indicators-will provide a description of the social situation and may relate to the quality of social life in terms of the fulfilment of individual needs and in terms of social institutions as well as describing particular problem areas. The third type of indicator, which we have identified, is the evaluative indicator, which will monitor progress towards achieving various goals at different policy and administrative levels.

This is where we have started to take our first tentative steps towards measuring the elusive concept of the quality of life. There is a growing awareness that the fruits of economic progress can only be fully comprehended by looking at the total social effect. duce from all of these data something which-in a | Providing the tools to do this is one of the greatest way broadly analogous to our major economic in- challenges facing statisticians in this coming decade. Sage Foundation, 1968)

Measuring the quality of life

Where campbell & Control

Central Statistical Office, Social Trends (HMSO, due out next

United Nations Economic Commission for Europe, Conference of European Statisticians Working Group on a System of Demographic and Social Statistics, Report (January, 1970)

R. Stone, An Integrated System Demographic, Manpower and Social Statistics and its Links with the System of National Accounts (Report to the 16th Session of UN Statistical Commission, 28 May, 1970)

E. B. Sheldon and W. E. Moore (editors), Indicators of Social Change (New York: Russell